

**IN THE DRAWINGS:**

Please amend the drawings as follows.

Submitted herewith is Replacement Sheet 2/6 which contains Figure 2 and has been amended to overcome the objections noted in the Office Action. Specifically, the Prefilter has been designated as reference character 56 and the DFSE has been designated as reference character 58.

Attachment: Replacement Sheet 2/6

### **REMARKS**

The Office Action dated November 28, 2005 has been received and carefully noted. The above amendments to the specification, drawings, claims, and the following remarks, are submitted as a full and complete response thereto. Claims 1-20 have been cancelled, and new claims 21-42 have been added. No new matter has been introduced, and therefore, claims 21-42 are pending and submitted for consideration.

Claims 1-20, stand rejected 35 U.S.C. §102(e) and §103(a) over *Al-Dhahir* (U.S. Patent No. 6,870,882), *Ishikawa* (U.S. Patent No. 5,455,844), *Malkemes* (U.S. Publication No. 2002/0106040), and *Dent* (U.S. Patent No. 6,934,317). As noted above, Applicants have cancelled claims 1-20 and have submitted new claims 21-42. Applicants submit that new claims 21-42 recite subject matter that is not taught, shown, or otherwise suggested by the cited combination of references, when the references are taken either alone or in combination. More particularly, Applicants submit that none of *Al-Dhahir*, *Ishikawa*, *Malkemes*, or *Dent* teach, show, or suggest the use of the DSFE/interference cancellation means in conjunction with the filter, estimator, and optimizer, as recited in Applicants' independent claims 21 and 38. Further, none of the cited combination of references teaches, shows, or suggests simultaneously performing interference cancellation and pre-filtering operations on a data vector through feed forward and feed back filters, as recited in Applicants' independent claim 32. As such, consideration and allowance of claims 21-42 over the cited combination of references is respectfully requested.


In conclusion, Applicants submit that new claims 21-42 each recite subject matter that is not taught, shown, or otherwise suggested by the cited combination of references, whether the

references are taken alone or in combination. As such, consideration and allowance of claims 21-42 is respectfully requested. Claims 21-42 are pending and submitted for consideration.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

  
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Enclosures: Petition for Extension of Time  
Amendment Transmittal  
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